

VARGAS
DEFENDANT'S
PRETRIAL MEMO

EXHIBIT
B

March 12, 2018

Jonathan B. Stepanian, Esq.
McQuaide Blasko
1249 Cocoa Avenue
Suite 210
Hershey, PA 17022

Re: Vargas v. Milton S. Hershey Medical Center

Dear Mr. Stepanian:

You have requested that I review the above-referenced matter from my perspective as a gastrointestinal and hepatobiliary pathologist.

Pathologists diagnose disease based on tissues removed from a patient. This encompasses biopsies, surgical resections, and autopsies. For the latter two, we would typically examine both the gross specimen (e.g. the colon) and then review glass slides which contain representative areas of the specimen under a microscope. I am very familiar with the pathologic features of diverticulosis and diverticulitis. I have reviewed the pathology related to such cases frequently (I would estimate hundreds of times). I have relied upon the following documents in making my assessment of this case.

1. Plaintiff's Complaint;
2. Medical Records of Hershey Medical Center Adm. 12/2/14 – 12/3/14;
3. Medical Records of Mecklenberg EMS;
4. Medical Records of Carolinas Medical Center;
5. Death Certificate;
6. Records of York Pathology Associates (including autopsy report);
7. Deposition transcript of Charles Dye, MD;

8. Deposition transcript of Amy Welch, MD;
9. Deposition transcript of Dr. Robert Thomas;
10. Report and Supplemental Report of Plaintiff's Expert Dr. Neil Julie;
11. Complete pathology slides received from York Pathology Associates (14AU107-1BW(R) – 14AU107-20BW(R)); and,
12. "Medical Guidelines for Airline Travel," Aerospace Medical Association.

Since the actual management of patients with acute gastrointestinal bleeding is outside of my scope of practice, I will focus my comments on the pathology identified at autopsy, and make some comments about issues that relate to general medical practice.

In Mr. Vargas' case, the circumstances described in the EMS records and at Carolinas Medical Center make it seem quite apparent that the decedent suffered a massive bleed from his lower GI tract. There does not seem to be significant disagreement or controversy regarding this. However, I have some concerns with the autopsy report. The first is that the pathologist who performed the report notes 1.5 liters of fresh blood within the abdominal cavity, however there are no gross photographs to support this statement. He also describes a site of possible perforation, but again, there is no gross photograph to support this contention. There are various artifacts which can be present shortly after death which may mimic pathologic findings. One is seepage of fluids into free spaces, which may mimic internal bleeding. It certainly could be the case that Mr. Vargas had internal bleeding into his abdomen, but without any photographs, I cannot independently verify or dispute this. As for the idea that there was a perforation, this can typically be diagnosed microscopically. Having reviewed the colonic slides in detail, I see no evidence to suggest that there was a perforation. Perforations

of the colon are characterized by acute inflammation with neutrophils (a type of white blood cell). As time goes on, you may see chronic inflammatory cells (e.g. lymphocytes) and foreign body giant cells. You will also frequently find stool which has crossed from the lumen of the bowel into the bowel wall. Although some of these responses may take 24 hours or more to occur (e.g. stool in the bowel wall with foreign body giant cell response), the first parts of the response (i.e. neutrophil migration to the site) happens within minutes. As none of these findings were observed in Mr. Vargas' case, I conclude that he did not have a perforation (as suggested by Dr. Thomas). I also note that the pathology report observes "dilated submucosal vessels." To the best of my knowledge, there is no established range of normal for the caliber of submucosal colonic vessels, particularly not when taking into account height, weight, and age. Therefore, not only would I not comment on whether his vessels were dilated or not, I would postulate that such a thing is unknowable based on current knowledge of human anatomy.

Dr. Julie comments that flying is dangerous for people with "intestinal weaknesses due to diverticulitis or ulcers" (page 2, Dr. Julie expert report). Diverticulitis is readily identified by microscopic examination. It is characterized by the presence of many neutrophils. This finding is absolutely absent in Mr. Vargas' slides. Furthermore, there is no information in the medical record to support a diagnosis of diverticulitis. Patients with diverticulitis (particularly if accompanied by perforation) have pain, fevers, elevated white blood cell counts, and shock. Again, these findings were not noted in the case of Mr. Vargas. Therefore, he did not have diverticulitis. Dr. Julie himself concluded that Mr. Vargas' ulcers were not instrumental in his death. Therefore, it is noteworthy that of the 2 examples of predisposing risks to patients

travelling by commercial air travel, one Mr. Vargas did not have (diverticulitis) and the other the Dr. Julie does not think significantly contributed to his death (ulcer).

Based on my review of all records cited above, I believe that Mr. Vargas sustained a massive lower GI bleed. I do not believe there is evidence to suggest diverticulitis, perforation, or vascular dilation.

The next issue to consider is whether or not there are well-established guidelines regarding air travel following gastrointestinal bleeding. I am not aware of any such guideline. In my opinion, any credible doctor should be aware of the association between long flights and deep vein thrombosis. This is commonly taught in medical school, and indeed, is widely known to the general public. However, I have not previously been exposed to standards or guidelines regarding air-travel following a gastrointestinal bleed. Throughout the course of preparing this statement, I have reviewed a consensus document from the Aerospace Medical Association that Dr. Julie cited within his report. This guideline does not make any suggestions regarding patients who had a GI bleed. There are some un-referenced comments regarding a 24 hour waiting period after colonoscopy with polypectomy, but Mr. Vargas had no polypectomy. This guideline does not mention diverticulosis and air-travel. Indeed, if diverticulosis were a contraindication to air travel, the airlines would uniformly go bankrupt, given the prevalence of diverticulosis. As of this writing, a search of Pubmed (the indexing system of the U.S. National Institutes of Health) for diverticulosis and air travel brings up zero matches.

In conclusion, Mr. Vargas suffered a massive lower gastrointestinal bleed on his flight home and expired. He had no evidence of perforation either at Hershey Medical Center or on autopsy. He had no evidence of diverticulitis either at Hershey Medical Center or on autopsy. I

am unaware of peer-reviewed standards regarding air travel following a gastrointestinal bleed or in patients with diverticulosis.

I hold these opinions to a reasonable degree of medical certainty.

Sincerely,

A handwritten signature in black ink, appearing to read 'S. Lagana', with a stylized flourish at the end.

Stephen M. Lagana, M.D.

STEPHEN M. LAGANA, MD

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412-867-6179

LICENSURE

- ♦ **New York State Medical License, unrestricted**
 - January 2011 – present
- ♦ **Board certified in Anatomic Pathology**
 - Diplomat of the American Board of Pathology, granted 7/29/2011

ACADEMIC APPOINTMENTS

- ♦ **Columbia University, New York Presbyterian Hospital, New York, NY**
- ♦ **Assistant Professor** of Pathology with subspecialty expertise in **gastrointestinal and liver pathology**
 - July 2012-present
 - Clinical responsibilities include sign out of gastrointestinal, liver, and general surgical pathology cases as well as frozen sections and adult autopsies
 - Gastrointestinal case load includes hospital patients (in-patient and out-patient), outreach cases (from community gastroenterologists), and outside consultations
 - Resident teaching activities include both formal lectures, periodic unknown slide sessions and informal teaching at the microscope
 - Medical student teaching including: lecturer to second year medical students including lectures on non-neoplastic stomach and esophagus, laboratory instructor to first year medical and dental students on normal and abnormal histology
 - Annual lectures to clinical GI and pediatric GI fellows

ADMINISTRATIVE ROLES

- ♦ **Director of Quality Assurance, Anatomic Pathology (2015-present)**
 - Responsibilities include setting annual QA agenda and submitting goals and reports to Hospital and University
 - Ensure compliance and successful completion of inspections by CAP, NY State, Joint Commission
 - Oversight of each division within Anatomic Pathology, consisting of review of all QA data and periodic inspection of each laboratory in AP

- Production of annual “report card” for each pathologist tracking turn-around time, case load, frozen section accuracy, peer-review, etc
- Monitor and adjudicate discrepancies with outside hospitals
- Major accomplishments in Quality Assurance
 - Won approval from Graduate Medical Education Committee to claim CME credits for daily Surgical Pathology Consensus/QA Conference, which should result in >1000 CME credit hours being awarded to surgical pathologists with no additional costs to the department (Co-direct course with Director of Surgical Pathology)
 - Increased percentage of randomly peer reviewed cases and re-instituted random peer review of GYN cases
 - Instituted real-time scanning of slides and requisitions for surgical pathology cases to ensure dictations correspond to right patient and right slide
 - Electronic task verification for hospital providers to enable complete recording of report generation and review by initiating provider

♦ **Hospital committee membership:**

- Columbia Oncology Operations Council –ensure department practices comply with published best practices from various non-pathology accrediting agencies (e.g. NCI, American College of Surgery, etc)
 - Assist in inspections by above named groups
- Columbia Doctors Quality Committee- (Faculty Practice) – ensure that department practices meet and exceed standards of our NY Presbyterian physicians

♦ **Co-director of Molecular Testing in Surgical Pathology (2015-present)**

- Responsibilities include interfacing with surgeons, endoscopists, and oncologists to determine optimal standing order algorithm for molecular testing in various tumor types
- Operationalizing aforementioned algorithms
- Establishment of ticketing system for one-off requests which are not part of an algorithm
- Overseeing clerical staff to ensure that tissue arrives at the appropriate laboratory (in-house or reference)
- Interface with reference labs as needed

EDUCATION

Columbia University Medical Center

New York, NY

Fellow in Surgical and Gastrointestinal Pathology

Completed one-year fellowship combining surgical pathology and gastrointestinal/hepatic pathology July 2011-July 2012

Responsibilities included daily independent sign out of either frozen sections, biopsies, or surgical resections as well as participating in resident teaching, clinical conference presentations and ongoing research projects

Columbia University Medical Center

New York, NY

Anatomic Pathology Residency Program

Completed June 2011

Chief Resident 2010-2011

University of Pittsburgh School of Medicine

Pittsburgh, PA

Doctor of Medicine, May 2008

Hofstra University

Uniondale, NY

Bachelor of Arts, Major Natural Science May 2004

♦ Graduated with Honors

RESEARCH

Peer reviewed publications:

Ladan Fazlollahi, Helen E. Remotti, Alina Iuga, Hui-Min Yang, **Stephen M. Lagana**, and Antonia R. Sepulveda (2017) **HER2 Heterogeneity in Gastroesophageal Cancer Detected by Testing Biopsy and Resection Specimens**. Archives of Pathology & Laboratory Medicine In-Press.

Gonzalez RS, **Lagana SM**, Szeto O, Arnold CA. **Challenges in Diagnosing Medication Resins in Surgical Pathology Specimens: A Crystal-Clear Review Guide**. Arch Pathol Lab Med. 2017 Feb 7. doi: 10.5858/arpa.

Hemant Varma, Phyllis L. Faust, Alejandro D. Iglesias, **Stephen M. Lagana**, Karen Wou, Michio Hirano, Salvatore DiMauro, Mahesh M. Mansukani, Kirsten E. Hoff, Peter L. Nagy, William C. Copeland, Ali B. Naini. **Whole exome sequencing identifies a homozygous POLG2 missense variant in an infant with fulminant hepatic failure and mitochondrial DNA depletion**. Eur J Med Gen. 2016
<http://dx.doi.org/10.1016/j.ejmg.2016.08.012>

Sung D, Iuga AC, Kato T, Martinez M, Remotti HE, **Lagana SM**. **Crypt Apoptotic Body Counts in Normal Ileal Biopsies Overlap with Graft Versus Host Disease and Acute Cellular Rejection of Small Bowel Allografts**. Hum Pathol. 2016 May 28. pii: S0046-8177(16)30098-3. doi: 10.1016/j.humpath.2016.05.017. [Epub ahead of print] PMID: 27246175

Elizabeth Margolskee; Fei Bao; Anne Koehne de Gonzalez; Roger K Moreira; **Stephen M Lagana**; Anthony N Sireci; Antonia R Sepulveda; Helen E Remotti; Jay H Lefkowitz; Marcela Salomao, MD. **Hepatocellular Adenoma Classification: A Comparative Evaluation of Immunohistochemistry and Targeted Mutational Analysis**. Diagn Pathol. 2016 Mar 9;11(1):27. doi: 10.1186/s13000-016-0475-5.

Nina Burbure, Benjamin Lebwohl, Peter H.R. Green, Carolina Arguelles-Grande, Govind Bhagat, **Stephen M. Lagana**. **Olmesartan Associated Sprue-like Enteropathy: a Systematic Review with Emphasis on Histopathology**. Hum Pathol. 2016 Apr;50:127-34. doi: 10.1016/j.humpath.2015.12.001.

Taylor SA, Vittorio JM, Martinez M, Fester KA, **Lagana SM**, Lobritto SJ, Ovchinsky N. **Anakinra-Induced Acute Liver Failure in an Adolescent Patient with Still's Disease**. Pharmacotherapy. 2016 Jan 9. doi: 10.1002/phar.1677

Lefkowitz J, **Lagana SM**, Kato T. **Hepatocellular Carcinoma in Noncirrhotic Liver with Glycogenotic Foci: Basic Science Meets Genomic Medicine**. Semin Liver Dis. 2015 Nov;35(4):450-6. doi: 10.1055/s-0035-

1568986

Stephen Lagana, Susan Hsiao, Fei Bao, Antonia Sepulveda, Roger Moreira, Jay Lefkowitz and Helen Remotti. **HepPar-1 and Arginase-1 Immunohistochemistry in Adenocarcinoma of the Small Intestine and Ampullary Region.** Archives of Pathology & Laboratory Medicine Jun 2015, Vol. 139, No. 6 (June 2015) pp. 791-795

Armando, Del Portillo, **Stephen M, Lagana**, Yuan, Yao, Takeshi, Uehara, Nirag, Jhala, Tapan, Ganguly, Peter, Nagy, Jorge, Gutierrez, Aesis, Luna, Julian, Abrams, Yang, Liu, Randall, Brand, Jorge L, Sepulveda, Gary W, Falk, Antonia R, Sepulveda. **Evaluation of Mutational Testing of Pre-neoplastic Barrett's Mucosa by Next Generation Sequencing of FFPE Endoscopic Samples for Detection of Concurrent Dysplasia and Adenocarcinoma in Barrett's Esophagus.** J Mol Diagn. 2015 Jul;17(4):412-9.

Anne K Koehne de Gonzalez, Marcela A Salomao and **Stephen M Lagana**. **Current concepts in the Immunohistochemical evaluation of liver tumors**
World J Hepatol 7(10):1403-1411. Published online 2015 June 08. doi: 10.4254/wjh.v7.i10.1403

Lagana SM, Salomao M, Remotti HE, Knisely A.S., Moreira RK. **Bile Salt Export Pump: a Sensitive and Specific Immunohistochemical Marker of Hepatocellular Carcinoma.** Histopathology. 2015 Mar;66(4):598-602. doi: 10.1111/his.12601.

Melissa Latorre MD, **Stephen M. Lagana MD**, Daniel E. Freedberg MD, Benjamin Lebwohl MD, Govind Bhagat MD, Suzanne K. Lewis MD, Peter H.R. Green MD. **Endoscopic biopsy technique in the diagnosis of celiac disease: one bite or two?** Gastrointest Endosc. 2015 Jan 29. pii: S0016-5107(14)02380-3

Lagana SM, Braunstein ED, Arguelles-Grande C, Bhagat G, Green PH, Lebwohl B. **Sprue-like histology in patients with abdominal pain taking olmesartan compared with other angiotensin receptor blockers.** J Clin Pathol. 2015 Jan;68(1):29-32. doi: 10.1136/jclinpath-2014-202615.

Hanna RF, Ward TJ, Chow DS, **Lagana SM**, Moreira RK, Emond JC, Weintraub JL, Prince MR. **An evaluation of the sensitivity of MRI at detecting hepatocellular carcinoma in cirrhotic patients utilizing an explant reference standard.** Clin Imaging. 2014 Jun 4. pii: S0899-7071(14)

Hanna RF, Finkelstone LA, Chow DS, Miloushev VZ, Escudero MR, **Lagana SM**, Prince MR. **Nephrogenic systemic fibrosis risk and liver disease.** Int J Nephrol. 2014;2014:679605. doi: 10.1155/2014/679605. Epub 2014 Mar 23.PMID:24778878

Chen, X., **Lagana, SM.**, Ponerros, J., Kato, T., Remotti, F., He, H., Kaminsky, D. and Hamele-Bena, D. (2013), **Cytological diagnosis of angiosarcoma arising in an immunosuppressed patient 6 years after multi-visceral transplantation.** Diagn. Cytopathol.. doi: 10.1002/dc.23068

Lagana SM, Moreira, RK, Remotti HE, Bao F. **Glutamine synthetase, Heat-shock Protein 70 and Glypican-3 in Intra-hepatic Cholangiocarcinoma and Tumors Metastatic to Liver.** Appl Immunohistochem Mol Morphol. 2013 May;21(3):254-7. doi: 10.1097/PAI.0b013e3182642c9c.

Lagana SM, Salomao M, Bao F, Moreira RK, Lefkowitz, J, Remotti HE. **Utility of an Immunohistochemical Panel Consisting of Glypican-3, Heat Shock Protein-70, and Glutamine Synthetase in the Distinction of Low-grade Hepatocellular Carcinoma from Hepatocellular Adenoma.** Appl Immunohistochem Mol Morphol. 2013 Mar;21(2):170-6. doi: 10.1097/PAI.0b013e31825d527f.

Lagana SM, Taub RN, Borczuk AC. **Utility of Glucose Transporter 1 in the Distinction of Benign and Malignant Thoracic and Abdominal Mesothelial Lesions.** Arch Pathol Lab Med. 2012 Jul;136(7):804-9. doi: 10.5858/arpa.2011-0219-OA.

Guo-Xia Tong, Lorenzo Memeo, Cristina Colarossi, Diane Hamele-Bena, Cristina Magi-Galluzzi, Ming Zhou, **Stephen M. Lagana**, Lara Harik, Jennifer M. Oliver-Krasinski, Mahesh Mansukhani, Lorenzo Falcone, Hanina Hibshoosh, and Kathleen O'Toole. **PAX8 and PAX2 Immunostaining Facilitates the Diagnosis of Primary Epithelial Neoplasms of the Male Genital Tract.** Am J Surg Pathol. 2011 Oct;35(10):1473-83.

Lagana SM, Hanna RF, Borczuk AC. **Pleomorphic (Spindle and Squamous Cell) Carcinoma Arising in a Peripheral Mixed Squamous and Glandular Papilloma in a 70 Year Old Man.** Arch Pathol Lab Med. 2011 Oct;135(10):1353-6.

Lagana SM, Moreira RK, Lefkowitz JH. **Hepatic Granulomas: Pathogenesis and Differential Diagnosis.** Clin Liver Dis. 2010 Nov;14(4):605-17.PMID: 21055685

Lagana S, Parwani AV, Nichols L. **Cardiac Sarcoidosis. A Pathology Focused Review.** Arch Pathol Lab Med. 2010 Jul;134(7):1039-46.

Nichols L, **Lagana S**, Parwani A. **Coronary Artery Aneurysm: a Review and Hypothesis Regarding Etiology.** Arch Pathol Lab Med. 2008 May;132(5):823-8. Review.

London B, Michalec M, Mehdi H, Zhu X, Kerchner L, Sanyal S, Viswanathan PC, Pfahnl AE, Shang LL, Madhusudanan M, Baty CJ, **Lagana S**, Aleong R, Gutmann R, Ackerman MJ, McNamara DM, Weiss R, Dudley SC Jr. **Mutation in glycerol-3-phosphate dehydrogenase 1 like gene (GPD1-L) decreases cardiac Na⁺ current and causes inherited arrhythmias.** Circulation. 2007 Nov 13;116(20):2260-8.

Invited lectures:

Update on Intrahepatic Cholangiocarcinoma. Hans Popper Hepatobiliary Pathology Society. 107th Annual Meeting of the United States and Canadian Academy of Pathology. Vancouver, BC, Canada. 3/18/2018

Uses and Abuses of Ancillary Testing in Liver Tumor Pathology. Grand Rounds at Weill Cornell Medical Center, Department of Pathology. November 6, 2017

How to Use (and Not Abuse) IHC and ISH in Liver Tumor Pathology. University of Chicago, Department of Pathology. May 5, 2017. Chicago, IL.

A Liver Tumor With an Identity Crisis. Liver evening specialty session. United States and Canadian Academy of Pathology- 2017 Annual Meeting. San Antonio, TX

Villous Atrophy Unrelated to Gluten. Intestinal Immune Based Inflammatory Diseases Symposium. March 8, 2013. Columbia University Faculty House. NY, NY.

The Duodenal Microbiome in Refractory Celiac Disease, Type 1. Celiac Disease Center Research Conference. March 1, 2015

Angiotensin receptor blockers other than olmesartan are not associated with histologic evidence of duodenitis. Celiac Disease Center Research Conference. February 1, 2014

Invited editorials:

Stephen M. Lagana, Julian A. Abrams. **A phenotypic analysis shows eosinophilic esophagitis is a progressive fibrostenotic disease.** Gastrointest Endosc. 2014 Apr;79(4):586-8. doi:

10.1016/j.gie.2013.12.008

Platform presentations/Abstracts:

The Duodenal Microbiome in Refractory Celiac Disease, Type 1. Stephen M. Lagana, Ian S. Cohn, Mara R. Rubenstein, Benjamin Lebwohl, Peter H.R. Green, Govind Bhagat. 105th Annual Meeting of the United States and Canadian Academy of Pathology, Seattle, WA, USA. 3/15/2016

Angiotensin receptor blockers other than olmesartan are not associated with histologic evidence of duodenitis. Stephen M. Lagana, Eric Braunstein, Benjamin Lebwohl, Peter H.R. Green. 103rd Annual Meeting of the United States and Canadian Academy of Pathology, San Diego, CA, USA. 3/4/2014

Mutational analysis by Next Generation Sequencing of preneoplastic Intestinal metaplasia in patients with Barrett Esophagus from endoscopic samples. Lagana, Stephen M.; Yao, Yuan; Uehara, Takeshi; Jhala, Nirag; Ganguly, Tapan; Sepulveda, Jorge; Liu, Yang; Brand, Randall; Falk, Gary W. Sepulveda, Antonia R. European Congress of Pathology, 2013, Lisbon, Portugal. 9/1/13.

A comparison of the immunophenotype of hepatocellular carcinoma and non-lesional hepatocytes when analyzed with next-generation markers. Stephen Lagana, Marcela Salamao, Fei Bao, Roger Moreira, Jay Lefkowitz and Helen Remotti. 100th Annual Meeting of the United States and Canadian Academy of Pathology, San Antonio, TX, USA. 3/1/2011

Poster presentations/Abstracts:

In-Situ Hybridization For Glypican-3 RNA Is More Sensitive Than Immunohistochemistry In Hepatocellular Carcinoma. Michael Lee, Anne Koehne de Gonzalez MD, Helen E Remotti MD, Manoj Gandhi MD, PhD, Shauna Levinson, Vikram Deshpande, Stephen Lagana. 106th Annual Meeting of the United States and Canadian Academy of Pathology. San Antonio, TX, USA. 2017.

Crypt Apoptosis Contributes To Mucosal Flattening In Celiac Disease Patients When Exposed To Dietary Gluten. Michael Lee, Alina Iuga, Hui-min Yang, Jude Fleming, Peter H.R. Green, Benjamin Lebwohl, Stephen M. Lagana. 106th Annual Meeting of the United States and Canadian Academy of Pathology. San Antonio, TX, USA. 2017.

Feasibility and Utility of In-situ Hybridization for Micro-RNA 21 in Intrahepatic Cholangiocarcinoma. Anthony Rubino, Anne Koehne de Gonzalez, Shauna Levinson, Manoj Gandhi, Helen E. Remotti, Stephen M. Lagana. 106th Annual Meeting of the United States and Canadian Academy of Pathology. San Antonio, TX, USA. 2017.

In-situ Hybridization for miR-21 in Hepatocellular Carcinoma. Anne Koehne de Gonzalez, Anthony Rubino, Shauna Levinson, Manoj Gandhi, Helen Remotti, Stephen Lagana. 106th Annual Meeting of the United States and Canadian Academy of Pathology. San Antonio, TX, USA. 2017.

GATA3 Immunohistochemistry in Adenocarcinoma of the Ampullary Region. Sonya Purushothaman MD, Helen E Remotti MD, Stephen Lagana, Susan J Hsiao MD PhD, Hui-Min Yang. 106th Annual Meeting of the United States and Canadian Academy of Pathology. San Antonio, TX, USA. 2017

In-Situ Hybridization for Albumin RNA in Pediatric Liver Cancers Compared to Common Immunohistochemical Markers. Anne K. de Koehne de Gonzalez, Ladan Fazlollahi, Amy Coffey, Helen E. Remotti, Stephen M. Lagana. 105th Annual Meeting of the United States and Canadian Academy of Pathology, Seattle, WA, USA. 3/15/2016. Poster 225

Usage of Helicobacter pylori Immunohistochemistry Is Not Associated With the Diagnostic Rate of Helicobacter pylori Infection. Jung Hoon Son, Jill Sink, Benjamin Lebwohl, Stephen M. Lagana. 104th

Annual Meeting of the United States & Canadian Academy of Pathology March 21-27, 2015 Boston, MA.

Histological Features of Colon Allograft in Intestinal Transplant Patients. Alina Iuga MD, Helen Remotti MD, **Stephen M. Lagana MD**, Aesis M. Luna, Armando Del Portillo MD, PhD, Antonia R. Sepulveda MD, PhD. 104th Annual Meeting of the United States & Canadian Academy of Pathology March 21-27, 2015 Boston, MA.

Apoptotic Body Counts in Normal Ileal Biopsies Overlap With Acute Cellular Rejection of Small-Bowel Allografts. Diana Sung, MD; Alina Iuga, MD; Helen Remotti, MD; **Stephen M. Lagana, MD**. Annual meeting of the College of American Pathologists 2015 Annual Meeting (CAP '15). Archives of Pathology & Laboratory Medicine: October 2015, Vol. 139, No. 10, pp. e2-e186

Utility of an Immunohistochemical Panel Consisting of Glypican-3, Heat-Shock Protein-70, and Glutamine Synthetase in the Evaluation of Hepatoblastoma. Amy Coffee, **Stephen M. Lagana**, Helen Remotti. 104th Annual Meeting of the United States & Canadian Academy of Pathology March 21-27, 2015 Boston, MA.

Use of optical coherence tomography (OCT) in the evaluation of gastric dysplasia. Xu M, **Lagana S**, Sethi A. Presented at Digestive Disease Week, Washington DC 2015

Clinical Characteristics, Associated Conditions, and Medication Use in Patients With Lymphocytic Gastritis. Frager S, Lebwohl B, **Lagana SM**, Green PHR. Presented at Digestive Disease Week, Washington DC 2015

Histopathologic Outcomes in Olmesartan Related Enteropathy. Akash Goel, Benjamin Lebwohl, Christina A. Tennyson, Suzanne K. Lewis, Carolina Arguelles-Grande, Peter H. Green, **Stephen M. Lagana**. Digestive Disease Week 2014, Chicago, IL, USA. 5/4/2014.

HepPar-1 and Arginase-1 in small intestinal and ampullary adenocarcinoma. Stephen Lagana M.D., Susan Hsaio, M.D., Fei Bao, M.D., Antonia Sepulveda M.D. Ph.D., Roger Moreira, M.D., Jay Lefkowitz, M.D., and Helen Remotti, M.D. European Congress of Pathology 2013, Lisbon, Portugal. 9/1/13. Poster 046.

Endoscopic Biopsy Technique and Biopsy Orientation in the Evaluation of Celiac Disease. Melissa Latorre MD, **Stephen M. Lagana MD**, Daniel E. Freedberg MD, Benjamin Lebwohl MD, Govind Bhagat MD, Suzanne K. Lewis MD, Peter H.R. Green MD. Digestive Disease Week 2013, Orlando, FL, USA. 8/19/13.

Bile Salt Export Pump (BSEP): A Sensitive and Specific Marker of Hepatocytic Differentiation in Liver Tumors. **Lagana SM**, Remotti H, Moreira RK. 101st Annual meeting of the United States and Canadian Academy of Pathology, Vancouver, BC, Canada. Poster #248. Tuesday, March 20, 2012.

CD146 Expression in Pleural and Peritoneal Mesothelioma. **Lagana SM**, Taub RN, Borczuk AC. 101st Annual meeting of the United States and Canadian Academy of Pathology, Vancouver, BC, Canada. Poster #296. Wednesday, March 21, 2012.

Immunophenotypic Subtypes of Hepatic Adenomas in a Large Tertiary Care Center in the United States. McMillen E, **Lagana SM**, Bao F. 101st Annual meeting of the United States and Canadian Academy of Pathology, Vancouver, BC, Canada. Poster #255. Tuesday, March 20, 2012.

Glutamine synthetase, Heat-shock Protein 70, and Glypican-3 in Intra- hepatic Cholangiocarcinoma. **SM Lagana**, Roger K. Moreira, Helen Remotti, Fei Bao. American Society of Clinical Pathology. Las Vegas, NV. October 21, 2011

Despite Warning, Gadolinium Is Safe in Patients with Liver Disease.

R F Hanna, MD, New York, NY; M R Escudero, MD; V Miloushev, MD; **S Lagana, MD**; E Kulon, MD; M R Prince, MD, PhD. Radiological Society of North America, 97th Annual meeting. Chicago, IL. November 27, 2011

MRI has greater sensitivity than 64-slice CT for detecting hepatocellular carcinoma in cirrhotic patients.

Robert F Hanna, **Stephen Lagana**, Roger K Moreira, Inna Postolov, Jean Emond, Martin R Prince. 19th Annual Meeting and Exhibition of the International Society of Magnetic Resonance in Medicine in Montreal, Canada, May 2011.

Diagnostic and Histogenetic Significance of PAX2 and PAX8 Expression in Three Uncommon Tumors of the Male Lower Urogenital Tract . **Stephen M. Lagana, MD**, Guo-Xia Tong, MD, PhD, Lorenzo Memeo, MD, Cristina Colarossi, MD, Mahesh Mansukhani, MD, Hanina Hibshoosh, MD, and Kathleen O'Toole, MD. American Society of Clinical Pathology Annual Meeting, October 2010, San Francisco, CA.

Glucose Transporter-1 Immunostaining Differentiates Intestinal Metaplasia With Dysplasia From Adenocarcinoma in Barrett Esophagus. **Lagana, SM**, Remotti F, Remotti H. College of American Pathologists Annual Meeting. September 2010, Chicago, IL.

Utility of Glucose Transporter 1 in the differentiation of peritoneal and pleural mesothelioma from non-malignant mesothelium.

SM Lagana, RN Taub and AC Borczuk. United States and Canadian Academy of Pathology 99th Annual Meeting. March 23 2010, Washington, D.C.

A Mutation in the Glycerol-3-Phosphate Dehydrogenase 1-Like Gene (GPD1L) Causes Brugada

Syndrome. Barry London, MD, PhD, Shamarendra Sanyal, MD, PhD, Michael Michalec, BS, Arnold E. Pfahnl, MD, PhD, Lijuan L. Shang, PhD, Laurie Kerchner, BS, **Stephen Lagana**, BA, Ryan G. Aleong, MD, Haider Mehdi, PhD, Rebecca Gutmann, RN, BSN, Raul Weiss, MD and Samuel C. Dudley, Jr., MD, PhD. Heart Rhythm Society, Boston MA, May 3, 2006.

3D Kinematic Analysis of Antennular Movements of Caribbean Spiny Lobster (Panulirus argus) in Response to Food Odorants.

Stephen M. Lagana, Peter C. Daniel, PhD. Colonial Academic Association annual meeting, Spring 2004

PROFESSIONAL MEMBERSHIPS AND ACTIVITIES

- College of American Pathologists 2008-present
 - **Professional Affairs Committee**, Junior Member (January 2010-December 2011). Junior member of national committee tasked with addressing challenges to the specialty of pathology. Specific concerns include ending abusive self-referral practices, finding innovative ways to deliver the most value to patients and clinicians through optimization of pathology reports and information management systems, private sector advocacy, and the role of the pathologist in accountable care organizations (ACO).
 - **Spokesperson**, as a CAP spokesperson, I am tasked with raising awareness of the profession of pathology while disseminating useful healthcare related information to the public. I have had radio interviews on subjects ranging from colon cancer to Pap tests which have been broadcast on hundreds of radio stations including the Associated Press Radio Network and Armed Forces Radio.
- Roger C. Haggitt Gastrointestinal Pathology Society (GIPS) 2015-present
- American Gastroenterological Association (AGA) 2015-present

- **New York Pathological Society 2013-present**
 - **Nominating Committee** (suggesting officers for the society) **2017-2020**
 - **Member of Planning Committee** (selecting topics, inviting guest speakers) **2014-2016**
 - **Director of social media outreach** via @NYPathSociety twitter handle **2015-2016**
- **United States and Canadian Academy of Pathology 2010-present**
- **Editorial Board Membership:** Diagnostic Pathology 2017-current
- **Peer reviewer-** Archives of Pathology and Laboratory Medicine, Histopathology, BMC Gastroenterology, BMC Cancer, Oncotarget, Journal of Clinical Pathology, American Journal of Clinical Pathology